

involuntary job separation were significantly more likely to report zero expense on prescription drugs (odds ratio 1.37, 95% confidence interval (CI) 0.11–1.71). Among those with non-zero drug expenses, job loss was associated with 12.8% increase in the out-of-pocket payment for the last prescription while controlling for personal characteristics and the prescription payment before the job loss. **CONCLUSIONS:** The findings from this study indicates that impacts of job loss may vary based on the health status of workers. Job loss may discourage workers from initiating drug treatment. For those already on medications, job loss is linked with an increase in drug expenses. It is unclear the increase is caused by the worse health status after job loss or the use of medications to replace other more costly medical care.

#### PHP23

##### THE DYNAMICS OF PRICES AND QUANTITIES OF NEW DRUGS UNDER TAIWAN'S NATIONAL HEALTH INSURANCE PROGRAM

Liu YM<sup>1</sup>, Hsieh CR<sup>2</sup>

<sup>1</sup>National Cheng Kung University, Tainan, Taiwan, <sup>2</sup>Duke University, Durham, NC, USA

**OBJECTIVES:** Technological change in medicine has been a major cause of rising health care expenditures in many countries. The adoption of new drugs plays an important role in accounting for the growth of spending on prescription drugs. This paper uses the prescription drug market in Taiwan as an example to investigate the evolution of prices and quantities of new drugs. **METHODS:** A new drug is defined in our study as one that was included in the NHI formulary after 1996. The study sample includes new molecules, new formulations, combinations, and indications till 2006. We run a cross-sectional equation for the launch price of new NMEs, and a panel regression for price ratio of current price versus the launch prices. Furthermore, we run a panel regression model for both sales and market share of new drugs. **RESULTS:** The preliminary results show that the degree of competition in a therapeutic market is weakly associated with the launch price, but negatively associated with the price ratio. The pioneer product can maintain a relatively higher price ratio in a longer period, but the price ratio of new drugs for chronic diseases decreases more than that for acute diseases. The competition of therapeutic market increases the sales, but decreases the market share of new drugs. The pioneer product has a positive impact on the sales and market shares of new drugs. The sales of new drugs for chronic diseases are higher than that for acute diseases, but the growth of market share of new drugs for chronic diseases is lower than that for acute diseases. **CONCLUSIONS:** The competition in the therapeutic market does not affect the regulated prices at the time of entry, but decreases the price ratios over time. The characteristics of new drugs are the major factors affecting market expansion and market substitution of new drugs.

#### PHP24

##### POTENTIAL PRESCRIBER MAPPING IN RURAL LOCATION OF SOUTH INDIA

Patil H<sup>1</sup>, Muragundi PM<sup>1</sup>, Ligade VS<sup>2</sup>, Dharmagadda S<sup>3</sup>, Janodia M<sup>4</sup>, Udupa N<sup>1</sup>

<sup>1</sup>Manipal College of Pharmaceutical Sciences, Manipal, India, <sup>2</sup>Manipal University, Manipal, India, <sup>3</sup>Manipal College of Pharmaceutical Sciences, Manipal, India, <sup>4</sup>Manipal College of Pharmaceutical Sciences, Manipal, India

**OBJECTIVES:** As the majority of the Indian population still residing in India it is not only imperative to the pharmaceutical companies marketing medicines to foray in to the rural market. But there is very less understanding of the actual potential and preferences of the rural health care practitioners. Hence in this study an attempt is made to understand the prescriber potential and to also to know the preferences of health care practitioners towards the company representative visits. **METHODS:** A questionnaire based survey was designed to study the prescriber potential in 211 villages of Belgaum district of Karnataka State in India. The survey included semi structured questionnaire aimed at 191 physicians and 75 chemists. The data from the questionnaire was coded transferred to SPSS software to analyze. The data is summarized by descriptive statistics. **RESULTS:** It was also found that most 44% of the doctors are in age group of 20 to 30 and only 11% doctors are well experienced. 40% of the doctors consult average 35 patients daily. In Belgaum rural area 65% doctors preferred amoxicillin in case of bacterial infection and also 31% cefixime. The prescriber interviews also revealed the interest of prescribers towards updating their knowledge by Continuous Medical Education (CME) and also doctors are interested for tele-marketing calls to know the scientific information. Stockiest of Belgaum visits about 66% of the retail shops, hence product availability is not a problem. **CONCLUSIONS:** In India, there is a potential in rural market form the selected category like anti-infective, antipyretic, pain management and cough therapy products.

#### PHP25

##### A QUALITATIVE EXPLORATION OF MALAYSIAN DOCTORS' PERCEPTIONS TOWARDS COMPLEMENTARY AND ALTERNATIVE MEDICINES (CAM)

Farooqui M<sup>1</sup>, Othman CN<sup>2</sup>, Hassali AA<sup>3</sup>, Saleem F<sup>3</sup>, Ul Haq N<sup>3</sup>, Sadeeqa S<sup>4</sup>

<sup>1</sup>Universiti Teknologi MARA, Penang, Malaysia, <sup>2</sup>Universiti Teknologi MARA, Pulau Pinang, Malaysia, <sup>3</sup>Universiti Sains Malaysia, Penang, Malaysia, <sup>4</sup>Universiti Sains Malaysia (USM), Penang, Malaysia

**OBJECTIVES:** The study aims to assess doctors' perceptions towards Complementary and Alternative Medicines (CAM) in their medical practice, factors that affect the referral of CAM and suggestions to improve CAM in medical practice. **METHODS:** A qualitative research approach was adopted to gain a better understanding of the current perceptions and practice held by doctors' within their medical professions. In order to gain a wide perspective of the issue, eleven doctors were purposively selected who were working in academics, hospitals and in the community health clinics. Participants were interviewed using a semi-structured interview guide. A saturation point was reached after the 10<sup>th</sup> interview, and no new information emerged with the subsequent interviews. All interviews were transcribed verbatim and analyzed by means of a standard content analysis framework. **RESULTS:** The doctors expressed a range of views on CAM that can be divided into two major themes: doctors' knowledge and understanding towards CAM and doctors' viewpoint on CAM in their professional practice. A key factor which affected doctor's

perspectives on CAM was the lack of scientific evidences. The attitudes on CAM were basically shaped based on their personal CAM use rather than knowledge gained during an academic course. Lack of knowledge on CAM was also attributing to the doctors' reluctance in CAM discussion with their patients. Though addition of CAM courses into the medical curriculum was proposed by some of the doctors; the practical implication was criticized as some found medical curriculum heavily packed with the biomedical courses. **CONCLUSIONS:** Majority of the doctors in this study were skeptical and uncertain about CAM due to lack of scientific evidence. Doctor-patient communication on CAM can only be improved when doctors' knowledge on CAM can be improved by providing necessary training on CAM.

#### HEALTH CARE USE & POLICY STUDIES – Equity and Access

#### PHP26

##### HEALTH IMPLICATIONS OF THE MTM ELIGIBILITY CRITERIA IN THE AFFORDABLE CARE ACT ACROSS RACIAL AND ETHNIC GROUPS

Wang J<sup>1</sup>, Qiao Y<sup>1</sup>, Shih YCT<sup>2</sup>, Jamison JJ<sup>3</sup>, Spivey CA<sup>1</sup>, Wan JY<sup>3</sup>, White-Means SI<sup>3</sup>,

Dagogo-Jack S<sup>3</sup>, Cushman WC<sup>3</sup>, Chisholm-Burns M<sup>3</sup>

<sup>1</sup>The University of Tennessee College of Pharmacy, Memphis, TN, USA, <sup>2</sup>University of Chicago, Chicago, IL, USA, <sup>3</sup>The University of Tennessee Health Science Center, Memphis, TN, USA

**OBJECTIVES:** Non-Hispanic Blacks and Hispanics are less likely than non-Hispanic Whites to be eligible for U.S. Medicare medication therapy management (MTM) services. The objectives for this study were to determine (1) racial/ethnic disparities in meeting MTM eligibility criteria as stipulated in the Patient Protection and Affordable Care Act (PPACA); and (2) whether there would be greater disparities in health/economic outcomes among MTM-ineligible than MTM-eligible groups (if so, the PPACA MTM eligibility criteria may aggravate existing disparities in these outcomes). **METHODS:** Medicare Current Beneficiaries Survey (2007–2008) was analyzed. PPACA MTM eligibility was compared between Whites and minorities using logistic regression. Various other regression models were used for other study outcomes (measures for health status, health services utilization/costs and medication utilization patterns). To determine difference in disparities across MTM eligibility categories, interaction terms were included between dummy variables for race/ethnicity and MTM eligibility and were interpreted on the multiplicative term and using marginal effects. **RESULTS:** The sample consisted of 12,966 Medicare beneficiaries (weighted to 51,635,149). Blacks and Hispanics were less likely than Whites to meet PPACA MTM eligibility criteria (adjusted odds ratio [OR] = 0.66 [P<0.05] for Blacks, and OR=0.62 [P<0.05] for Hispanics). Racial and ethnic disparities in self-perceived health status (SPHS), activities of daily living (ADLs), and instrumental ADLs were greater among the MTM-ineligible than the MTM-eligible populations (e. g., for SPHS, difference in marginal effects between Whites and Blacks=27.25 [P<0.01] across MTM eligibility categories, and between Whites and Hispanics=20.62 [P=0.03]). Disparities were smaller in number of chronic conditions and number and costs of physician visits among MTM-ineligible compared to MTM-eligible populations. No other variables exhibited significant interaction effects. **CONCLUSIONS:** The PPACA MTM eligibility criteria is not an ideal alternative in resolving disparity issues associated with Medicare MTM eligibility criteria. MTM eligibility criteria which reduce rather than aggravate disparities have yet to be identified/devised.

#### PHP28

##### PATIENTS AND DOCTORS WORKING TOGETHER TO IMPROVE HEALTH SERVICE: DIFFICULTIES AND CHALLENGES IN BETWEEN IN CHINA

Jia P, Zhang L, Mao X, Zhang M

Sichuan University, Chengdu, China

**OBJECTIVES:** To conduct a survey of the possible factors that cause the tension between patients and doctors. **METHODS:** The survey including 16 items (8 for patients and 8 for doctors) was conducted in one of the Level A hospitals in southwest region of China for a total of 853 questionnaires with 580 for patients and 273 for doctors respectively. Microsoft Excel 2007 was used to perform data extraction and analysis. **RESULTS:** The survey yielded to 822 questionnaires with a 96.37% response rate. Most of the patients (93.19%) want doctors to seek their opinions when providing the treatment. While 61.48% doctors indicated it was difficult to share decision-making with patients. Account for 60.47% patients would like to obtain information from doctors. Whereas, 52.75% of doctors expressed that it was difficult to provide patient with high quality and reliable evidence or information. Twenty percent of the patients didn't fully satisfied with the existing treatment, while 63% doctors indicated that it was difficult to meet patients' desire. The reasons for the difficulty in communication were mainly about: short communication time (50.48%) and improper communication method (37.07%). Only 14.61% of doctors expressed that they had enough time to communicate with patients. **CONCLUSIONS:** Lack of 'communication openness' was identified as a major factor which hindered the shared decision-making. A successful bidirectional way to encourage shared decision-making to alleviate the current tense relationship for both sides is needed.

#### PHP29

##### DRUG ACCESS IS IMPROVED BY THE ESSENTIAL DRUG SYSTEM AND "LOW-PRICED DRUG" POLICY IN CHINA

Liu M, Huang L, Zhao D, Xu L

AstraZeneca, Beijing, China

**INTRODUCTION:** (1) Since 2009 China had implemented national essential drug system, and issued first and second edition of NEDL (National Essential Drugs List) respectively in 2009 and 2013, which respectively covered 307 drugs and 520 drugs. (2) With development of Chinese health care reform, planning low-priced drug policy and adjusted essential drug system will impact on drug access. **OBJECTIVES:** To describe Chinese policies' development for promoting drug access, analyze the policies' impact and potential lacks. **METHODS:** Through collecting relevant policies from national departments and 31 provinces, apply descriptive statistics and comparison to summarize these policies' impact. **RESULTS:** (1) On May 2013 China